

## Proposed Changes to the In-Use Off-road Diesel Vehicle Regulation

### Why are changes to the regulation being proposed?

Staff is proposing significant amendments to the in-use off-road diesel vehicle regulation for several reasons:

- The recession has negatively affected employment and revenue in the construction sector, and other industries affected by the regulation. Many, if not all, fleets subject to the regulation have been affected by the recession and are in need of relief.
- Since the beginning of 2010, ARB staff has been undertaking a thorough effort to review and update the methodology and data inputs to staff's estimates of off-road diesel vehicle emissions. Staff now believes that past and future emissions from off-road vehicles are significantly lower than previously estimated, both due to new data and due to a reduction in activity resulting from the recession.
- Updating the regulation provides an opportunity to simplify and streamline the regulation, as well as to seek ways to offer fleets more flexibility in how they choose to reduce their emissions, for example by choosing to turn over to newer cleaner vehicles rather than apply exhaust retrofits.

### What are the proposed changes?

The proposed changes to the regulation provide a path to compliance without any required retrofits, simplify the regulation, and lower the costs of the regulation significantly while still maintaining progress toward clean air and providing emission reductions needed to meet the state's commitments. The table below presents staff's major proposed changes to the regulation:

<b>Key Proposed Amendments</b>	
<b>1. Delay start of requirements by 4 years for all fleets</b>	- most fleets do nothing until 2017
<b>2. Retrofitting is no longer required; fleets can meet requirements through turnover</b>	
<b>3. Lower annual requirements to clean up engines to no more than 5 to 10% of a fleet's horsepower</b>	(reduced from 28 to 30%)
<b>4. Extend double credit for early retrofits</b>	
<b>5. Reduce peak year costs by removing the 2013 'Balloon Year'</b>	(fleets had 180% of the requirements of other years)
<b>6. Increase low use threshold from 100 to 200 hours annually</b>	
<b>7. Remove 2014 requirements for fleets that did sufficient turnover and retrofitting by 2010</b>	– benefits fleets that were proactive
<b>8. Provide simpler compliance option for the smallest fleets</b>	– those with less than 500 horsepower can phase out Tier 0/1 beginning 2019, rather than deal with fleet averages
<b>9. Achieve more NOx benefits in later years</b>	- lower NOx targets in 2022 and 2023, requiring slightly more Tier 4i and Tier 4 engines
<b>10. Fleets may receive credit for actions which clean up their fleet before their initial compliance date</b>	
<b>11. Simplify reporting of flex engines and remove penalty for fleets that own flex engines</b>	

**How do the proposed changes affect what fleets have to do?**

Changes provide substantial relief	Existing Regulation	Proposed Amendments
Initial large fleet requirements	2010	2014
Number of mandatory retrofits	>100,000	0
Percent of fleets that can comply with 8 to 10% turnover annually with no other actions	~30%	100%
Maximum portion of the fleet to be controlled by 2014	~85%	~5%
Number of separate emission fleet averages to comply with	2	1

**How will the proposed changes affect costs to fleets?**

The proposed amendments will significantly reduce cost:

- Costs of the initial 5 years reduced by 97%
- Peak year cost moved from 2013 to 2019, lowered 73%
- Overall 20 year costs down ~72%

In substantially reducing costs, the regulation maintains its overall cost-effectiveness.

**What considerations did ARB staff use in developing the proposed changes?**

On April 22, 2010, staff presented an update to the Board on the off-road and truck and bus regulations. The Board asked staff to draft changes to the regulations, following 10 guiding principles:

1. Continue progress toward cleaner air
2. Maintain public health benefits
3. Meet SIP commitments
4. Incentivize greenhouse gas reductions
5. Improve cost effectiveness
6. Lower peak year costs
7. Consider cumulative impact of both regulations
8. Provide most relief to fleets hardest hit by recession
9. Ensure emission reductions as economy recovers
10. Support clean technologies

Staff's proposed amendments to the regulation follow the 10 guiding principles, as well as incorporate recent input received from stakeholders. They maintain as much of the emissions and public health benefits expected from the original regulation as possible, and meet the Board's State Implementation Plan commitments.

**When will the proposed changes be considered by the Air Resources Board?**

The amendments will be considered by the Board at a hearing on December 16 & 17, 2010.

**More information:**

For further information on ARB's diesel vehicle and equipment regulations, please call the California Air Resources Board Diesel Hotline at 866-6DIESEL (866-634-3735). For further information about the off-road diesel vehicle regulation, please visit the off-road regulation website at: <http://www.arb.ca.gov/ordiesel>.